

WHAT IS CLAIMED IS:

1 1. A portable speaker unit comprising:
2 a speaker driver;
3 a first affixed cylindrical ring, the first cylindrical ring having a top and a
4 sidewall, the top being coupled to the speaker driver;
5 a base plate configured in parallel with the speaker driver;
6 a second cylindrical ring, the second cylindrical ring having a bottom and a
7 sidewall, the bottom being affixed to the base plate; and
8 one or more interposed unaffixed cylindrical rings each having sidewalls,
9 wherein in a first expanded state the sidewalls of adjacent rings form frictional
10 seals and the speaker driver, the base plate and the one or more interposed unaffixed
11 cylindrical rings form a substantially airtight rigid chamber having a height substantially
12 equal to the sum of the sidewall heights of the cylindrical rings, and in an unexpanded state
13 the sidewalls of the cylindrical rings are substantially parallel to one another.

1 2. The portable speaker unit of claim 1 wherein the first cylindrical ring
2 sidewall has a first height, the second cylindrical ring sidewall has a second height
3 approximately equal to the first height, and each interposed unaffixed cylindrical ring has a
4 height approximately equal to the first height.

1 3. The portable speaker unit of claim 1 further comprising a lid having at
2 least one arc for receiving the speaker unit and directing sound.

1 4. The portable speaker unit of claim 3 wherein the lid includes two arcs
2 for receiving the speaker unit horizontally and directing sound.

1 5. The portable speaker unit of claim 4 wherein the base plate includes at
2 least one flat portion.

1 6. The portable speaker unit of claim 3 wherein the lid is attached to the
2 speaker unit by a hinge.

1 7. The portable speaker unit of claim 1 further comprising a damping pad
2 attached to the base plate to receive the speaker driver when the portable speaker unit is in an
3 unexpanded state.

1 8. The portable speaker unit of claim 1 wherein the base plate includes a
2 filter.

1 9. The portable speaker unit of claim 8 wherein the filter is a passive
2 radiator.

1 10. The portable speaker unit of claim 8 wherein the filter is a tuned port
2 that allows bass energy to escape the enclosure.

1 11. The portable speaker unit of claim 1 wherein the top of the first affixed
2 cylindrical ring is affixed to a flange and the flange is connected to the speaker driver.

1 12. A portable speaker unit comprising:
2 a speaker driver;
3 a first cylindrical ring, the first cylindrical ring having a top and a sidewall, the
4 top being affixed to the speaker driver;
5 a base plate configured in parallel with the speaker driver;
6 a second cylindrical ring, the second cylindrical ring having a bottom and a
7 sidewall, the bottom being affixed to the base plate;
8 one or more interposed unaffixed cylindrical rings each having sidewalls; and
9 a lid enclosure,
10 wherein in a first expanded state the sidewalls of adjacent rings form frictional
11 seals and the speaker driver, the base plate and the one or more interposed unaffixed
12 cylindrical rings form a substantially airtight rigid chamber having a height substantially
13 equal to the sum of the sidewall heights of the cylindrical rings, and in an unexpanded state
14 the sidewalls of the cylindrical rings are substantially parallel to one another, and the lid is
15 placed over the speaker and in contact with the base plate to completely enclose said portable
16 speaker unit.

1 13. The portable speaker unit of claim 12 wherein the lid includes two arcs
2 for directing the speaker unit across a range of horizontal angles.

1 14. The portable speaker unit of claim 12 wherein the base plate is circular
2 and includes at least one flat portion.

1 15. The portable speaker unit of claim 12 wherein the base plate includes a
2 filter.

1 16. The portable speaker unit of claim 12 wherein the base plate includes a
2 housing with a retractable cord spooling assembly that allows a speaker cord to be
3 automatically retracted during transport.

1 17. A portable audio system including a portable speaker unit comprising:
2 a class-D amplifier;
3 a speaker driver receiving an audio signal from the class-D amplifier;
4 a first cylindrical ring, the first cylindrical ring having a top and a sidewall, the
5 top being coupled to the speaker driver;
6 a base plate configured in parallel with the speaker driver;
7 a second cylindrical ring, the second cylindrical ring having a bottom and a
8 sidewall, the bottom being affixed to the base plate; and
9 one or more interposed unaffixed cylindrical rings each having sidewalls;
10 wherein in a first expanded state the sidewalls of adjacent rings form frictional
11 seals and the speaker driver, the base plate and the one or more interposed unaffixed
12 cylindrical rings form a substantially airtight rigid chamber having a height substantially
13 equal to the sum of the sidewall heights of the cylindrical rings, and in an unexpanded state
14 the sidewalls of the cylindrical rings are substantially parallel to one another.

1 18. The portable audio system of claim 17 wherein the base plate includes
2 a housing with a retractable cord spooling assembly that allows a speaker cord to be
3 automatically retracted during transport.

1 19. The portable speaker unit of claim 17 further comprising a lid having
2 two arcs for receiving the speaker unit horizontally and directing sound.

1 20. The portable speaker unit of claim 17 wherein the base plate is circular
2 and includes at least one flat portion.